ATMOSPHERIC FOAM CONCENTRATE STORAGE TANK



TECHNICAL DATA

STORAGE CAPACITY	200 to 10000 Ltrs.
MATERIAL OF CONSTRUCTION	Stainless Steel (304 or 316) or Carbon Steel with FRP Lining
EXPANSION DOME	2% of Total Tank Capacity
FINISH	Red RAL 3001 or Yellow
ORDERING INFORMATION	Specify Tank Capacity, Material of Construction of Tank, Optional: Accessories

APPLICATION

Atmospheric foam concentrate storage tank is used with Inline Foam Inductor and Inline Balance Pressure Foam Proportioning system. Refer to data-sheets/ product catalogues of these devices for equipment operational and installation guidelines.

DESCRIPTION

The atmospheric foam concentrate storage tank is manufactured in stainless sel material. The tank is provided with an expansion dome with a volume not less than 2% of the total capacity of the tank. All the tanks must be kept filled upto the level of half way of expansion dome. A sediment sump is provided at the bottom of the concentrate tank. The tank is provided with an inlet, an outlet, a drain connection and a fill connection. The horizontal tanks are supported by two saddles/legs welded to the tank and drilled for anchoring. Tank is provided with lifting lugs, designed to lift empty tanks. The tank has flat ends but can be provided with dished ends if needed.

When using AFFF or AR-AFFF type foam concentrates in the storage tank, it is recommended that a thin layer (approximately 6mm) of a quality mineral/sealer oil be placed on the surface of the foam concentrate after filling the tank with the correct quantity. This alleviates the problem associated with evaporation of the foam concentrate. The foam concentrate should be inspected periodically following any of these standards: NFPA 11, EN 13565-2, or other relevant standards. For tanks containing mineral oil, special tools should be used during annual sampling exercise to make sure that no oil is taken with the foam. Stainless steel pipes need to be used for all interconnecting piping to the tank, especially with HD AFFF/AR-AFFF types of foam concentrates.

Carbon Steel pipes shall not be used and pipes carrying foam concentrate shall not be galvanized. Foam spillage over the coated tank shall be avoided or cleaned immediately with clean water.



INSTALLATION

- If the tank has been received in a satisfactory condition, place the tank in the desired level location and anchor to the ground. The tank should be lifted with the use of lifting lugs only.
- If possible, leave an area around the tank free from any walls and obstacles etc.
- All interconnecting piping must be self-supported firmly to prevent stress on the tank.
- Preferably the tank should be installed under a shed. If not, care should be taken that the ambient temperature of the environment does not go above 50 degree Celsius for long durations.

Reference Catalogues:

Inline Foam Inductors: HD 187 Inline Balance Pressure Foam Proportioners: HD 289 Foam Concentrate By-Pass Valve: HD 186 Skid Mounted Balance Foam Proportioning System: HD 190

The tank is provided with following as standard supply:

- 1. Fill connection with expansion dome.
- 2. Drain connection at bottom.
- 3. Flanged suction connection at the bottom of tank.
- 4. Flanged return connection at the bottom or at the top of tank.
- 5. Sight Gauge
- 6. Air Vent
- 7. Lifting Lugs

Optional Supply:

- 1. Ladder
- 2. Level Switch/ Level Transmitter
- 3. Custom nozzle connections, sizes, locations & quantities
- 4. Platform on the top
- 5. Disshed instead of flat end
- 6. Vertical configurations
- 7. Seismic/ Structural Analysis



2" FILL CONNECTION (STAINLESS STEEL HANDLE SQ-'H X H' INSIDE AIR VENT LIFTING LUG IGHT GLASS M 2" PVC PII Sch. 80 NAME PLATE 2" FILL CONNECTION (STAINLESS STEEL) HANDLE AIR VENT 7 SQ-' H X H' INSIDE EXPANSION DOME в' (та LIFTING LUG (CARBON STEEL) SIGHT GLASS P 150 Ø " PVC PIPE F' NB, FLANG ASME B16.5#1 `<u>N' LE</u> LADDER (CARBON STEEL) (OPTIONAL) NAME PLATE **F**¢ B' (TANK INSIDE MIN 'Ø J' 4 SLOTS Γο -0-₿**æ**Ĵ SADDLE SUPPORT (CARBON STEEL) SECTION A-A 150 1 • * A IA DIMENSION OF ATM. FOAM CONC. STORAGE TANK (200 to 2000 Ltrs.) Ħ F' NB, FLANGE ASME B16.5#150-2 NOS 1" B A I /ALVE (STAINLESS STEEL) (STAINLESS STEEL 50 66 ØJ' 8 SLOTS SECTION A-A DIMENSION OF ATM. FOAM CONC. STORAGE TANK (2100 to 10000 Ltrs.)

ATMOSPHERIC FOAM CONCENTRATE STORAGE TANK - DIMENSIONS

* TO SYSTEM SUPPLY CONNECTION

** RETURN FLOW FROM SYSTEM TO STORAGE TANK

NOTE:

1) STORED LIQUID - FOAM CONCENTRATE

2) TYPE - HORIZONTAL

3) ALL CARBON STEEL ATMOSPHERIC FOAM CONCENTRATE STORAGE TANKS ARE WITH 2MM THICK MIN. FRP INTERNAL LINING

4) FLANGES, PIPE & PIPE FITTINGS ARE OF STAINLESS STEEL 304

5) PAINTING - POLYURETHANE RED PAINT RAL 3001 FROM OUTSIDE

6) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE APPROXIMATE AND MAY VARY SLIGHTLY



CAPACITY & DIMENSIONAL CHART FOR ATM. FOAM CONCENTRATE STORAGE TANK												
NOMINAL CAPACITY (LITERS)	ØA ±10	B ±25	C ±25	D ±25	F	G ±10	НхН	ØJ	к	L	М	N LEG ISMC CHANNEL
200	550	925	675	360	40 NB	200	450x450	Ø23	48	150	150	100x50
250	595	990	740	400	40 NB	200	450x450	Ø23	48	150	150	100x50
300	610	1129	880	400	40 NB	200	450x450	Ø23	48	150	150	100x50
350	660	1129	880	450	40 NB	200	450x450	Ø23	48	150	150	100x50
400	705	1129	880	490	40 NB	200	450x450	Ø23	48	150	150	100x50
450	750	1129	880	530	40 NB	200	450x450	Ø23	48	150	150	100x50
500	790	1129	880	570	40 NB	200	450x450	Ø23	48	150	150	100x50
600	775	1410	1050	560	40 NB	250	450x450	Ø23	48	150	150	100x50
650 700	805 835	1410 1410	1050 1050	580 610	40 NB 40 NB	250 250	450x450 450x450	Ø23 Ø23	48 48	150 150	150 150	100x50 100x50
750	865	1410	1050	630	40 NB	250	450x450 450x450	Ø23	48	150	150	100x50
800	895	1410	1050	660	40 NB	250	450x450	Ø23	48	150	150	100x50
850	920	1410	1050	680	40 NB	250	450x450	Ø23	48	150	150	100x50
900	945	1410	1050	700	40 NB	250	450x450	Ø23	48	150	150	100x50
950	970	1410	1050	720	40 NB	250	450x450	Ø23	48	150	150	100x50
1000	1000	1410	1050	750	40 NB	250	450x450	Ø23	48	150	150	100x50
1100	900	1910	1350	650	40 NB	300	450x450	Ø28	58	175	200	150x75
1150	920	1910	1350	660	40 NB	300	450x450	Ø28	58	175	200	150x75
1200	940	1910	1350	680	40 NB	300	450x450	Ø28	58	175	200	150x75
1250	960	1910	1350	700	40 NB	300	450x450	Ø28	58	175	200	150x75
1300	980	1910	1350	710	40 NB	300	450x450	Ø28	58	175	200	150x75
1350	995	1910	1350	730	40 NB	300	450x450	Ø28	58	175	200	150x75
1400 1500	1015 1050	1910 1910	1350 1350	750 770	40 NB	300 300	450x450 450x450	Ø28 Ø28	58 58	175 175	200 200	150x75 150x75
1600	1085	1910	1350	810	40 NB 40 NB	300	450x450 450x450	Ø28	58	175	200	150x75
1700	1120	1910	1350	830	40 NB	300	450x450	Ø28	58	175	200	150x75
1800	1150	1910	1350	860	40 NB	300	450x450	Ø28	58	175	200	150x75
1900	1185	1910	1350	890	40 NB	300	450x450	Ø28	58	175	200	150x75
2000	1215	1910	1350	920	40 NB	300	450x450	Ø28	58	175	200	150x75
2100	1225	1975	1250	930	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
2200	1250	1975	1250	950	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
2300	1275	1985	1260	970	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
2500	1275	2155	1330	970	50 NB	300	600x600	Ø25	50	220	120	SADDLE
2600	1300	2155	1330	990	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
2700	1325	2155	1330	1010	50 NB	300	600x600	Ø25	50	220	120	SADDLE
												SUPPORT SADDLE
2800	1325	2235	1380	1010	50 NB	300	600x600	Ø25	50	220	120	SUPPORT
2900	1350	2230	1380	1040	50 NB	300	600x600	Ø25	50	220	120	SUPPORT
3000	1350	2320	1430	1040	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
3250	1400	2350	1450	1080	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
3500	1450	2350	1450	1120	50 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
4000	1500	2500	1550	1170	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
4250	1550	2480	1550	1210	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
4500	1550	2650	1650	1250	65 NB	300	600x600	Ø25	50	220	120	SADDLE
4750	1600	2600	1650	1250	65 NB	300	600x600	Ø25	50	220	120	SUPPORT
5000	1600	2740	1710	1250	65 NB	300	600x600	Ø25	50	220	120	SUPPORT SADDLE
												SUPPORT
5250	1600	2800	1800	1250	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT SADDLE
5500	1600	3010	1890	1250	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT SADDLE
5750	1600	3150	1980	1250	65 NB	300	600x600	Ø25	50	220	120	SUPPORT
6000	1625	3185	2000	1280	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
6500	1650	3350	2110	1300	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
7000	1700	3400	2150	1340	65 NB	300	600x600	Ø25	50	220	120	SADDLE SUPPORT
7500	1750	3440	2590	1380	65 NB	300	600x600	Ø25	50	250	150	SADDLE SUPPORT
8000	1780	3540	2590	1410	65 NB	300	600x600	Ø25	50	250	150	SADDLE
8500	1800	3680	2630	1410		300	600x600	Ø25	50	350	250	SUPPORT SADDLE SUPPORT
					65 NB							SADDLE
9000	1840	3730	2680	1460	65 NB	300	600x600	Ø25	50	350	250	SUPPORT
9500	1870	3810	2680	1490	65 NB	300	600x600	Ø25	50	350	250	SADDLE SUPPORT
10000	1900	3880	2750	1510	65 NB	300	600x600	Ø25	50	350	250	SADDLE SUPPORT



LIMITED WARRANTY

HD FIRE PROTECT PVT. LTD. hereby referred to as HD FIRE warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives. HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expenses in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. Into event shall HD Fire's product liability exceed an amount equal to the seleprice. The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

NOTICE :

The equipment presented in this bulletin is to be installed in accordance with the latest publication standards of NFPA or other similar organisations and also with the provision of government codes or ordinances wherever applicable.

The information provided by us is to the best of our knowledge and belief, and consist of general guidelines only. Site handling and installation control is not in our scope. Hence we give no guarantee for result and take no liability for damages, loss or penalties whatsoever, resulting from our suggestion, information, recommendation or damages due to our product.

Product development is a continuous programme of HD FIRE PROTECT PVT. LTD. and hence the right to modify any specification without prior notice is reserved with the company.



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